Claims

1. A dengue virus infection inhibitor characterized by containing, as the active ingredient, at least a carbohydrate molecule having as an essential constituent an oligosaccharide chain represented by the following formula (I):

$$Hex^{1}NAc\beta 1-3Hex^{2}\beta 1-4Hex^{1}\beta 1-$$
 (I)

(wherein Hex1 and Hex2 represent a hexose).

2. A dengue virus infection inhibitor characterized by containing, as the active ingredient, at least a molecule represented by the following formula (II):

$$(X)_n$$
-R (II)

(wherein X represents an oligosaccharide chain represented by the following formula (I):

$$Hex^{1}NAc\beta 1-3Hex^{2}\beta 1-4Hex^{1}\beta 1-$$
 (I)

(wherein Hex¹ and Hex² represent a hexose); R is a substrate selected from the group consisting of a hydrogen atom, a substituent having an S, N, O or P atom, a hydrocarbon group, a lipid, a protein and a synthetic polymer, each of which may have a substituent; n is a number of 1 or greater representing the number of the oligosaccharide chains binding to R).

- 3. The dengue virus infection inhibitor according to Claim 1 or 2, wherein either a hexose represented by Hex³ or an aminohexose represented by Hex³NAc is beta-1-4 linked to the non-reduced end of the oligosaccharide chain represented by the formula (I).
- 4. The dengue virus infection inhibitor according to Claim 1 or 2, wherein Hex¹ in the oligosaccharide chain represented by the formula (I) is glucose (Glc), and Hex² is galactose (Gal) or mannose (Man).

- 5. The dengue virus infection inhibitor according to Claim 3, wherein Hex¹ in the oligosaccharide chain represented by the formula (I) is glucose (Glc), Hex² is galactose (Gal) or mannose (Man), and Hex³ is galactose (Gal) or N-acetyl galactosamine (GalNAc).
- 6. The dengue virus infection inhibitor according to Claim 3, wherein the oligosaccharide chain represented by the formula (I) is paragloboside represented by

Gal β 1-4GlcNAc β 1-3Gal β 1-4Glc β 1- (Ia).

7. The dengue virus infection inhibitor according to Claim 3, wherein the oligosaccharide chain represented by the formula (I) is

Galβ1-4GlcNAcβ1-3Manβ1-4Glcβ1- (Ib).

8. The dengue virus infection inhibitor according to Claim 3, wherein the oligosaccharide chain represented by the formula (I) is

GalNAcβ1-4GlcNAcβ1-3Galβ1-4Glcβ1- (Ic).

9. A monoclonal antibody to paragloboside represented by the following formula (Ia):

Galβ1-4GlcNAcβ1-3Galβ1-4Glcβ1- (Ia).

10. A monoclonal antibody to an oligosaccharide chain represented by the following formula (Ib):

Galβ1-4GlcNAcβ1-3Manβ1-4Glcβ1- (Ib).

11. A monoclonal antibody to an oligosaccharide chain represented by the following formula (Ic):

GalNAcβ1-4GlcNAcβ1-3Galβ1-4Glcβ1- (Ic).

12. A dengue virus infection inhibitor characterized by containing, as the active ingredient, at least a monoclonal antibody according to any one of Claims

9 to 11.